# Economic Issues of Proposed Arena

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**Executive Summary**

The Port of Seattle seaport is a thriving job- and revenue-creator for King County, the Puget Sound region, and Washington state. Marine cargo operations support more than 33,000 family-wage jobs and generate $3 billion in revenue for our region.

Because much of the cargo that crosses Port of Seattle docks is discretionary – able to reach market destinations via a variety of gateways in Canada and the U.S. – the port’s ability to compete for that cargo rests in large part on the port’s naturally deep harbors, fully-developed terminal facilities, and excellent connections to road and rail systems. Shippers primarily base their decisions on efficiency and cost.

Shippers place a high degree of importance on overall transit times, overall cost of the shipment (of which transit time is a large component), and reliability of transit times. Drayage trucks, the trucks that move containers from ship to rail yards or to local destinations, are a crucial component of the supply chain that shippers depend on to move goods to market. Drayage truck “turn times” – how long it takes a truck to move a container to or from port terminals – is one of the most important criteria for shippers when choosing a gateway port.

Congestion increases costs and decreases efficiency and reliability for shippers. Gentrification of industrial areas also has an impact on costs, as industrial firms are forced to relocate to more distant locations, or, in some cases, go out of business.

Should the arena be located in the current proposed SoDo location, not only would costs of transportation for shippers likely increase because of additional congestion, which increases drayage truck turn time, but the pressure to convert industrial lands to other uses (such as the proposed entertainment zone adjacent to the proposed arena) could drive the warehouses, distribution center, and other support businesses to locations outside of the Duwamish Manufacturing and Industrial Center.

The Port of Seattle has good opportunities for future growth but these could be significantly impacted if the arena moves forward as currently planned.

## I. The Port of Seattle Has Opportunities for Future Growth

The Port of Seattle has experienced sustained growth during the past 11 years across all trade routes and is expected to continue to grow in the future, reaching its Century Agenda goal of 3.5 million TEUs by 2039 (under the high forecast) to 2051 (under the low forecast).

Competition with container ports in British Columbia and Southern California is very strong. British Columbia ports currently hold 3.0 percent market share of the imports from Asia through the West Coast that are bound for U.S. markets, which an increase of 1.5 percent in 2002. Approximately half of these containers move through the Port of Prince Rupert and half through Metro Port Vancouver.

Port of Seattle has significant advantages in that competition:

*Naturally deep harbors.* Port of Seattle offers 11 container berths with depths of 45-50 feet below lowest water level, sufficient for the largest ships in transit today.

*Fully-built terminals with state-of-the-art equipment.* The Port's four container terminals have 27 cranes, including 13 super post-Panamax cranes, 11 post-Panamax cranes, and three Panamax cranes. ("Panamax" indicates a ship that is the maximum width that can travel through the current configuration of the Panama Canal.) The Port of Seattle container terminals comprise 512 leased acres and expansion to 526 acres is possible.

The Port of Seattle's success depends largely on the size of the local market and the efficiency of the port and inland transportation systems for non-local destinations.

## II. Carriers and Shipper Select Ports based upon their Efficiency and Cost

The Port's primary tenants are terminal operators, which select a port that best serves the needs of the ocean carriers, who in turn need to serve the interests of shippers.

### *Carriers*

Ocean carriers' highest priority is to turn the ship on time and at the lowest cost. The objective is to minimize capital and operating costs subject to providing the highest level of service that is possible. Carriers need to serve the interests of shippers.

Carriers have been under substantial financial pressure for the past five years and financial difficulties are expected to continue for the foreseeable future. The financial difficulties are caused by several factors. First, as a result of the worldwide economic downturn, there is weakened demand on traditional key trades, principally the Transpacific and Asia-Europe trade routes. Second, carriers have ramped up acquisition of larger container ships, which provide significant economies of scale and potential cost savings. However, these acquisitions are coming on line at a time of weak demand and the additional debt to pay for the new vessels is a burden for the carriers.

These conditions have the following implications for shippers. Carriers are expected to provide more basic service, with fewer resources to service the shipper and with a focus on costs as opposed to

service. The decision to focus on costs means that ports which have additional costs imposed upon them, like additional trucking costs associated with the proposed arena, could lose market share to other ports that do not have this challenge. Carriers could also seek to cancel services or modify services by skipping ports of call if the net revenues are higher. Again, this could impact ports that are disadvantaged by external forces.

In addition, carriers will likely adjust operations to meet space and equipment availability as conditions change. For shippers, this implies that when carriers provide rates that are too far below market, and better paying cargo comes available, carriers will find ways to take on the better paying cargo, which creates additional risk to the shipper.

***Shippers***

Shippers overarching goal is to reduce their supply chain costs, which means having reliable market coverage across a broad range of routes with favorable transit times while minimizing costs for door-to-door cost per unit.

Imports tend to drive the Trans-Pacific trade because there are more full containers of imported products, the value of the import product is typically higher than for export products and the ocean shipping rate is also higher for imports than for exports.

In deciding which West Coast port use, shippers placed much more emphasis on results, such as overall cost, transit time and reliability. Respondents[1] to a survey of port selection criteria indicated that their preference was as follows from highest to lowest importance:

1. Drayage truck turn times (72.7% rated this criteria as very important)
2. Overall transit time (72.7%)
3. Owner cost per container (63.6%)
4. Reliability [% on schedule] (63.6%)

Shippers placed a high degree of importance on truck drayage times and overall transit times as well as on overall cost of the shipment and the reliability of the shipment. The potential impact of the proposed Arena could place the Port of Seattle at a competitive disadvantage due to burden of increased congestion in the Duwamish area and the potential relocation of drayage terminations to more distant locations.

## ***III. Summary of Impacts***

It is likely that the location of the proposed arena will exacerbate the situation for exporters by increasing the cost of transportation related to both additional congestion and likely shift of businesses to more remote locations.

[1] Source: The Tioga Group, Improving Marine Container Terminal Productivity, prepared for

This will impact port-related traffic in two ways. First, road congestion will cause disruptions in firm's supply chains and will increase transportation costs by reducing terminal-related operations[2]:

- Some firms have already curtailed trips to Port terminals in the afternoon during existing sporting events. The addition of the proposed arena will increase the number of days that will be affected.
- Pushing industrial firms south will impact terminal efficiency by increasing container dwell time at the terminal.
- Likewise, these impacts will increase the cost of terminal operations since containers that are dropped off late require extra handling/paperwork before being assigned to a vessel.
- Additional road congestion also increases the uncertainty of container pickup and drop-off time, amplifying the operational uncertainty of the port.
- The bottom-line is that congestion increases costs and decreases the efficiency of the Port.

Second, increased gentrification of the north Duwamish area will increase property values, forcing industrial firms to seek more distant locations or go out of business.

## IV. Economic Impact of changes in the Duwamish Industrial Area

The Duwamish M/IC is a unique industrial area that provides a sanctuary for family wage working class jobs. Gentrification could lead to a significant loss of jobs. According to the Puget Sound Regional Council (PSRC)[3], there were 58,744 jobs in the Duwamish M/IC in 2010, the last year for which data are available. This includes a variety of family wage jobs in the following sectors:

- Services (15,147 jobs),
- Wholesale/Trade/Utilities (13,635 jobs),
- Manufacturing (13,287 jobs),
- Government (6,714 jobs),
- Retail (2,520 jobs),
- Finance/Insurance/Real Estate (1,231 jobs),
- Construction (588 jobs),
- Education (322 jobs).

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[2] Source: Effects of Hinterland accessibility on U.S. Container Port Efficiency by Wan, Zhang, Yuen, June 2012

[3] Source: Seattle's Duwamish Manufacturing/Industrial Center & Ballard/Interbay Manufacturing Center, PSRC Growth Management Board, July 12, 2012.

There is a strong linkage between the Port of Seattle container terminals and activities and employment in the Duwamish Manufacturing/Industrial Center.

## *V. Economic Impacts of International Container Operations at the Port of Seattle*

The Port of Seattle prepared an economic impact study in 2009, based upon 2007 port operations.[4] International container operations generated 5,703 direct jobs. Including indirect and induced effects, international container operations created an estimated 15,277 total jobs.

International container operations generated direct wages/salaries of $292 million. Including indirect and induced effects, international container operations created total income of $1.3 billion.

These are good family wage jobs, with a direct wage/salary of approximately $51,000 per job for individuals engaged in vessel operations, terminal operations and inland transportation. There is an expected increase in the number of containers that are cross-docked, which will likely offset decreases in jobs due to future productivity improvements at the terminals.

### *Exporters*

Washington State is the largest U.S. exporter on a per capita basis, with 8,000 companies engaged in exporting. Approximately four percent of Washington companies export, compared to a national average of one percent. Washington State is tied to trade, either directly or indirectly. The state export initiative is seeking to increase the number of Washington state companies exporting by 30 percent and help 5,000 Washington businesses achieve $600 million in new export sales.

The Port of Seattle handled 536,301 full export containers (TEUs) in 2011. Exporters benefit greatly from the container terminal systems at the Port of Seattle. A substantial portion of these export containers come from firms in Washington State:

- Approximately 35 percent of export containers through the Port of Seattle (190,000 TEUs) were generated by firms located in Washington State.
- Approximately 12 percent of these export containers (62,000 TEUs) came from firms located in King County.
- Approximately 6 percent of these export containers (34,000 TEUs) came from firms located in the City of Seattle, and many of these are located in the Duwamish Industrial area.

Washington state exporters come from all parts of the state with a variety of products, including:

- Agricultural products (grain, hay cubes, fruit, vegetables, dairy products etc.)
- Forest products (logs, lumber, paper and other forest products)
- Fish and seafood (cod, salmon, crab and other products)

[4] Source: Martin Associates, the 2007 Economic Impact of the Port of Seattle.

- Manufactured products (glass and other manufactured products), among others.

Export shippers report that container availability is one of the greatest challenges facing their business. As ocean carriers attempt to reduce their transportation costs as congestion increases and delays the return of containers, the availability of containers for export cargo is further comprised, resulting in lost sales and unreliable service to overseas buyers.

The more distant exporters (Eastern Washington as well as Whatcom, Clark and other counties) attempt to get two trips per day to Port of Seattle marine terminals. Congestion due to the proposed Arena will disrupt the opportunity to accomplish this, which will add to transportation costs for these firms.

Exporters from Seattle such as those engaged in seafood products have several plants and offices located in King County and in other parts of Washington State. Exporters are primarily concerned about the adequacy of system capacity, congestion, lack of containers and increased transportation rates. There are numerous trips between each location, which would be disrupted by the congestion caused by the proposed Arena.

***Importers***

Importers bring containers through the Port of Seattle to meet the needs of consumers as well as inputs to manufacturing in both the local and more distant market regions. Importers that serve inland markets are increasing the use of cross-dock operations, in order "to rapidly consolidate shipments from disparate sources and realize economies of scale in outbound transportation. Cross-docking essentially eliminates the inventory-holding function of a warehouse while still allowing it to serve its consolidation and shipping functions. The idea is to transfer incoming shipments directly to outgoing trailers without have to store them. The implications of this strategy for ports and port communities are that fewer containers are sent out directly in international (ISO) containers and a growing share are sent out in domestic containers. The contents of three international containers can be placed in two domestic containers. This transfer creates jobs directly as containers are unloaded and loaded as well as other functions that are performed such as racking, shrink wrapping, pallet building, assembly, inspection, rework and reverse logistics services, among others. These facilities are generally located close to the terminals. The proposed Arena could cause operators to move facilities to more distant locations, with increases in transportation costs.

Local importers (like Boeing) also seek to minimize the costs of their supply chain. Increased congestion associated with the Arena would increase the costs of using the Port of Seattle.

**Figure 1 – Location of Importers/Exporters in the Duwamish Industrial Area that use the Port of Seattle Container Terminals**
**Source: BST Associates using data from PIERS**